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STARTING EARLY: PERCEPTIONS OF PARENTS AND TEACHERS ON 6TH TO
12TH GRADE TRANSITION TIMELINE FOR STUDENTS WITH HIGH-
INCIDENCE DISABILITIES

by

Josie M. Nielsen

A creative project submitted in partial fulfillment
of the requirements for the degree

of

MASTERS OF EDUCATION

in

Special Education and Rehabilitation
(Transition Concentration)

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2013

ABSTRACT

Starting Early: Perceptions of Parents and Teachers on a 6th to 12th Grade Transition

Timeline for Students with High-Incidence Disabilities

by

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Utah State University, 2013

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Department: Special Education and Rehabilitation

Post-secondary educational and employment outcomes for students with high-incidence disabilities continue to lag far behind their nondisabled peers. A carefully designed timeline including evidence-based transition skills and practices may serve as a guideline for teachers and parents as they prepare student /child with high-incidence disabilities for successful transition into adulthood. This project examined the importance and age/grade-appropriateness of skills/activities on a transition timeline, based on ratings by teacher and parent focus groups. Participants included eight secondary teachers with at least 10 years experience, and five parents of children with high-incidence disabilities who graduated from both high school and post-secondary school. Thirteen individuals participated in separate focus groups consisting of (a) parents (n=5), (b) middle-school teachers (n=5), and (c) high school teachers (n=3). Focus groups rated items on a scale of 1-4 for both importance and age/grade-appropriateness, then discussed each item. Data were analyzed based on median and range scores for each item, and the

items were rank ordered according to importance and age/grade-appropriateness to produce a timeline of transition skills/activities for both parents and teachers. A final survey was given to participants to validate the timeline as a valuable resource to guide both parents and teachers.

(72 pages)

INTRODUCTION

For many years, research has shown a considerable gap for post-school employment and educational outcomes between students with high-incidence disabilities and their nondisabled peers, (Blackorby & Wagner, 1996). Recent studies (e.g., Newman et al., 2011) show post-school employment and educational outcomes for students with high-incidence disabilities continue to considerably lag behind when compared to their peers without disabilities. For example, when surveying high school exiters with learning disabilities, only 21% were enrolled in a 4-year college, and 63% were employed 8-years after completing high school, (Newman et al., 2011) as compared to 2012 high school graduates in which 66% were enrolled in college, (United States Bureau of Labor Statistics, 2013). As teachers and parents are preparing youth with high-incidence disabilities for adulthood, these gaps in post-secondary outcomes are not acceptable. Both teachers and parents need to pinpoint skills critical to achieving successful post-school outcomes and activities necessary to accomplish prior to transition from school to employment or post-secondary education.

Researchers have identified practices and programs that are predictors of successful post-secondary outcomes for students with high-incidence disabilities (Benz, Lindstrom, & Yovanoff, 2000; Test et al., 2009; Wagner et al., 2011; Wagner, Blackorby, Cameto, & Newman, 1993). One predictor of post-secondary success for a child with high incidence disability is active family participation in the transition process as described by Xu, Puvis, and Terpstra (2010). Additionally, Lindstrom, Doren, Metheny, Johnson, and Zane (2007) found correlations between families that established strong support, advocacy, and intentional career activities, and post-secondary success of their

child in the areas of employment, education, and independent living. Therefore, parents need information regarding intentional career activities that are evidence-based practices and programs.

As it relates to transition to adulthood for students with disabilities, the “what” to teach is evidence-based practices leading to successful post-secondary outcomes, but the question still remains, “what specifically are these practices and when should they be taught”? Experts in the field (Irving, 1988; Pierangelo & Giuliani, 2004; Thoma, Saddler, Purvis, & Scott, 2010) discuss the need to begin post-secondary transition services early, even before age 14, as determined by a student's individualized education program (IEP). The assumption is, by using evidence-based practices and beginning transition planning early, teachers and parents can implement transition practices and programs that lead to successful outcomes for students with high-incidence disabilities.

Although there are some transition-related lists and timelines published in the literature (Irving, 1988; Loyd, & Brolin, 1997; Pierangelo & Giuliani, 2004; Synatschek et al., 2007; Utah Parent Center 2011), these primarily target vocational and career readiness of students with moderate disabilities. Transition timelines specifically comprised of evidence-based skills and activities for students with high-incidence disabilities were not found. More attention is needed for teaching skills that result in successful post-school outcomes, and calibrating the delivery of skill instruction along with a timeline that begins early and continues throughout the transition years in a progressive manner. A transition timeline for students with high-incidence disabilities would be a resource for both teachers and parents.

Ideally, teachers would work from a list of transition skills to be acquired based on a timeline from middle school through high school, and according to the students' needs based on their (IEP). The timeline would include both skills and activities. Skills would be defined as the ability to do something (e.g., accepting "no" for an answer) whereas activities would be defined as a practice to encourage learning through actual experience (e.g., job shadowing). Early skills would be general and connected to academic or social skills necessary for school adaptation (e.g. following one-step instructions). Upon entering high school, the timeline would become more specific (e.g., contact the local vocational rehabilitation office regarding a student's 16th birthday and the need to open a case file).

Parents may have a similar but separate timeline because some skills and activities may be better carried out in the home setting or overseen by the head of household. In a home-based setting, parents could instruct their child on skills different from those taught at school, (e.g. Grocery shopping), but also reinforces skills taught in school (e.g., following directions). Early skills might include such ones as *doing chores independently*, whereas a high school skill might include more complex ones as *maintaining an individual budget*. Lists could form the basis for discussion between teachers and parents as they examine a child's performance across environments and make projections regarding future skills and activities.

Literature Review

The student researcher searched for peer-reviewed articles on students with high incidence disabilities to find research on post-school outcomes, evidence-based practices, beginning transition services early, family involvement, and timelines of skills and

activities. Key words and phrases included: *learning disability, high-incidence disability, mild disability, transition, post-secondary outcomes, evidence-based practices, starting early, beginning early, family involvement, parent involvement, timeline, sequence, developmental process, developmental stages, checklists, and lists*. Google Scholar, EBSCO host, and ERIC were the search engines used. The student researcher also found literature from reviewing the reference section of the literature reviewed. Experts in the field were contacted which referred the student researcher to books (K. Storey, P. Wehman, M. Wehmeyer, K. Wittig, personal communications, February 20, 2013). Benz, Lindstrom, and Yovanoff, (2000) and Newman et al. (2009) were the most frequently cited in peer review literature about student outcomes. The student researcher found two articles with evidence-based strategies in their title. On timelines, 18 articles were found but not used for the following reasons: (a) some discussed timelines with early childhood transitioning into school, (b) some discussed timelines of learning strategies, and (c) some discussed checklists of steps during instruction. Two comprehensive timelines, partial lists of timelines, and charts for transition activities and skills were found in books. The student researcher will review the most relevant articles on post-school outcomes, evidenced-based practices, and finally a compilation of the timelines of transition practices.

Newman et al. (2011) described the results of the National Longitudinal Transition Study 2 (NLTS2). The purposes of this study were to (a) conduct a large national survey of youth with disabilities as they transition into adulthood, (b) to produce data for researchers, policy makers, and educators, and (c) to examine data on post-school outcomes, (the variables of interest). There were 11,270 participants chosen for this 10-

year study beginning in 2000. Participants were ages 13 through 16 at the beginning of the study and represented the 12 disability categories from Individuals with Disabilities Education Act including: learning disability, speech/language impairment, mental retardation, emotional disturbance, hearing impairment, visual impairment, orthopedic impairment, other health impairment, autism, traumatic brain injury, multiple disabilities, deaf. Data collection activities included telephone interviews, mail surveys, student assessment, school characteristic survey, school program survey, teacher survey, and transcript. These were collected in five waves beginning in 2000 and ending in 2009. The final wave of data collection yielded information on 5,368 individuals' ages 21 to 25. The study described (a) participants and family characteristics; (b) secondary school experiences including programs, services, and activities; (c) post-secondary experiences including programs, services and social activities; (d) measures of post-school outcomes; and (e) positive outcomes and factors leading to those outcomes. In the area of post-secondary education, the surveys showed only 45% of students with emotional disturbance, 51% of students with other health impairments, and 61% of students with learning disabilities were at any point enrolled in any type of postsecondary education. However, the actual percentages of post-secondary outcomes may even be lower since only 49% of the participants answered the survey. Positive outcomes were also found in this survey, an example of this is when participants graduated from secondary school they were three times more likely to go onto post-secondary education, than those participants who did not graduate (59% versus 17%).

Test et al. (2009) reviewed transition research and identified evidence-based practices given criteria that they established a review of empirical research. Criteria were

divided into strong, moderate, and weak indicators based on the number of studies and degree of experimental control showing relationships between variables.

Table 1

Strong and moderate evidence-based practices in transition according to Test et

al.(2009).

Level of Evidence	Practice
Strong	Life skills
Strong	Purchasing skills
Moderate	Involving students in the IEP process
Moderate	<i>Self-Directed IEP</i>
Moderate	<i>Self-Advocacy Strategy</i>
Moderate	Self-advocacy skills
Moderate	Self-determination skills
Moderate	Functional reading sight words
Moderate	Banking skills
Moderate	Cooking skills
Moderate	Food preparation skills
Moderate	Grocery shopping skills
Moderate	Home maintenance skills
Moderate	Leisure skills
Moderate	Restaurant purchasing skills
Moderate	Purchasing using the “one more than” strategy
Moderate	Safety skills
Moderate	Social skills training
Moderate	Life skills using community-based instruction
Moderate	Life skills using computer-assisted instruction
Moderate	Life skills using self-management
Moderate	Job-specific employment skills
Moderate	Job-specific employment skills using computer-assisted instruction
Moderate	Completing a job application
Moderate	Employment skills using community-based instruction
Moderate	Teaching self-management for employment skills
Moderate	Job-related social/communication skills
Moderate	Teaching parents and families about transition
Moderate	Provide community-based instruction
Moderate	Structure program to extend series beyond secondary school
Moderate	<i>Check & Connect</i>

Practices identified as having strong or moderate indicators are shown in Table 1. These evidence-based practices should be included in a transition timeline. Researchers cautioned practitioners that evidence-based practices do not guarantee outcomes. Nevertheless, Test et al. (2009) identified a list of evidence-based practices for teachers to use as starting points for transition timeline.

Pierangelo and Giuliani (2004) included a comprehensive transition planning timeline based on specific guidelines for skill development of vocational and career readiness. Skills were grouped according to years prior to graduating from high school starting with 5 years (i.e., about age 13). For each skill, there was a chapter referenced for further discussion. This transition timeline was probably the most organized and comprehensive attempt in the literature to lay out skills and evidence-based practices.

The Utah Parent Center's handbook for parents, *From 'no' where...to 'know' where*, (Utah Parent Center, 2011), includes a general transition planning timeline starting at age 10. This handbook with Pierangelo and Giuliani (2004) are the most useful timelines for this project because they not only address vocational readiness, but also academic readiness.

Loyd and Brolin (1997) developed a comprehensive scope and sequence chart designed for individuals with moderate disabilities to use for school or adult training, including three major life domains subdivided into 22 competencies. Although these competencies did not address academic readiness, they are very comprehensive in addressing vocational readiness. Loyd and Brolin (1997) provided ideas for starting points for this project.

Irvin (1988) developed a transition timeline based according to skill categories of values, human relationships, occupational, job and daily living skill. Irvin provided general guidelines for grades k-3, 4-6, and 7-9. Synatschk et al. (2007) provided a simple timeline which included groupings of elementary, middle, and high school students with activities toward employment and career planning. Both Irvin (1988) and Synatschk et al. (2007) are noteworthy because they provide a foundation for beginning transition services early. Although transition skills and activities for vocational and career readiness were frequently referenced, transition skills and activities specifically designed for academic readiness was the component most missing in the literature, and the component most crucial for the students with high-incidence disabilities.

The need to start transition practices early for successful postsecondary outcomes is well documented (Irving, 1988; Pierangelo & Giulaiani, 2004; Thoma, Saddler, Purvis, & Scott, 2010). However, what is not currently documented is a comprehensive timeline with tasks specific to grade or age of the child for both teachers and parents. A timeline can be developed through identifying evidence-based practices that lead to successful student outcomes. However, a timeline should be modified based on input from teachers and parents regarding the importance and age appropriateness of skills/activities for students with high-incidence disabilities. Second, items should be assessed as to whether they are positioned temporally according to age and grade.

Purpose Statement

The purpose of this study is to develop and refine a timeline with skills and activities for student/child with high-incidence disabilities starting from 6th through 12th grade. Refinements will be based on ratings and input from both teachers and parents.

Research Questions

The research questions are as follows:

1. When eight teachers and five parents of student/child with high-incidence disabilities are given a timeline of transition activities and skills from grades 6th through 12th, to what extent will they make adjustments or changes in timeline skills and activities regarding the importance and age/grade-appropriateness?
2. To what extent will they validate the timeline items in terms of importance age/grade-appropriateness?

METHOD

Participants

Initially, the student researcher identified and invited 12 teachers to participate in the survey based on the criteria of having successfully taught students with high-incidence disabilities for at least 10 years in a secondary school setting. Six of the 12 teachers taught in a middle-school setting, while the other six teachers had taught in a high school or post-secondary setting. The rationale for dividing the teachers into two groups was that perceptions and expectations of teachers can vary considerably from middle-school to high school levels. However, each was able to evaluate the importance and age/grade-appropriateness variables relative to transition.

The student researcher invited teachers to identify and contact 10 parents based on the criteria of the parents having a child with high-incidence disabilities who graduated from a post-secondary educational setting. Parents were instructed to contact the student researcher to communicate their interest in participating. Purposeful sampling was used

to replicate the ratio of the parent populations attending (IEP) meetings in the school district. The rationale for including parents of postsecondary students/graduates is that they will be in a position to reflect back on the school and home experiences of their child and evaluate the importance and age-appropriateness of timeline items.

Only eight of 12 teachers were able to attend, including two males and six females, (five middle-school and three high school teachers). The middle-school focus group included a teacher who taught in elementary, middle-school, and secondary and is now in an administrative position in the district. The remainder of the middle-school teachers have served as department heads in their schools. The secondary focus group included teachers who have taught in secondary, two are now in administrative district positions, while the other teacher is teaching at a post-secondary educational setting. Only five parents were able to attend, including two males and three females. They were Caucasian and their socioeconomic status included middle to upper-middle class. Parent focus group members all earned college degrees, some with advanced degrees. They had high expectations for their children.

Thirteen individuals participated. The three separate focus groups consisted of (a) three high school teachers, (b) five middle-school teachers, and (c) five parents of children with high-incidence disabilities who successfully graduated from a postsecondary educational program. The children with high incidence disabilities graduated from the following programs: one from a vocational school, three from local university earning bachelor degrees, and two from universities earning advanced degrees. The children's disability categories included: Specific Learning Disabled, Emotional Disability, and Other Health Impaired.

Setting

The focus group meetings took place in a conference room at a local school. Each focus group met separately to individually rate and discuss items. The members were seated around a conference table. A recording device was activated during each session to record discussions. Focus groups had access to the timeline instrument, whiteboard, projector, a computer, document camera, paper, and writing tools.

Measures

The measures consisted of rating timeline skills/activities based on (a) the importance of the skill/activity, and (b) the age/grade-appropriateness as it is relevant to student/child with high incidence disabilities. After the focus groups, social validity measures were taken from participants looking at the finished timeline and completing a survey on its value as a resource.

Timeline instrument development. The student researcher developed the timeline instrument, (see Appendix A), based on the available literature. However, as noted in the review, literature is limited. The student researcher supplemented literature-based items in the timeline with skill targets taken from curricula used in a local school district. The student researcher also used the recommendations from practitioners in the field. Whenever possible, evidence-based practices were used as a guide to develop the list of skills and activities on the timeline.

Transition skills and activities were related to both academic and vocational readiness. After skills and activities were identified, they were categorized for school or home according to logic for implementation based on probability of teaching and using a skill in the particular setting. For example, home is a logical place for a student to learn

home maintenance skills, whereas school is a logical place for a student to learn *self-directed IEP* skills. Lists were divided up by "age grouping" (e.g., ages 11-13, 14-16, 17 and 18) for home, and "grade grouping" (e.g., grades 6-8, 9 and 10, 11, 12) for school. Items were placed in age/grade level based on expectations for learning skills/activities according to typical development and core curricula.

Both the grade and age-based timeline instruments were about four pages in length. To the right of each item in the timeline instrument appeared a rating scale. There were two rating scales: one for importance and one for age/grade-appropriateness. For the importance dimension, the scale ranged from four (very important) to one (not important). For the age/grade-appropriateness dimension, the scale ranged from four (very appropriate for age) to one (very inappropriate for age). For items placed in a very inappropriate age, participants will be asked to identify the appropriate age. The timeline instrument allow the rater to (a) change where (i.e., home or school) the skill or activity takes place, (b) change when (i.e., grade/age) the skill or activity should be taught, and (c) change the skill or activity by adding or deleting descriptive language.

Procedures

Survey questionnaire screening. Experts (having more than 10 years experience successfully working with student/child having high incidence disabilities) were contacted and asked to screen out survey items that were above or below the abilities of the average student/child with high-incidence disabilities and to review the survey for presentation and ease of reading. Two activities were recommended by experts: (a) some items may have been important throughout grades 6 through 12 or ages 11 through 18,

therefore there should have been a section for them, (b) other items should be combined as much as possible such as grades 6 through 8.

Questionnaire and focus group sessions. Separate 90-min sessions were held for parent, middle-school, and high school teacher focus groups. A session consisted of three activities in sequence: (a) provision of informed consent, (b) completion of a print-based survey, and (c) discussion in a focus group. These activities are described below.

Informed consent. First, a consent form (see Appendix B) was given to each participant explaining (a) the purpose of the project, (b) the participants' role in participation, (c) the option of their continued participation, and (d) the confidentiality of their identity.

Print-based survey questionnaire. After consent was received, the student researcher provided the participant with the questionnaire. Instructions directed the participant to rate all items on the survey for both importance and age/grade-appropriateness, add items, and make comments or recommendations. The student researcher clarified any questions on the skill/activity listed. The questionnaire took approximately 20-30 min to complete.

Focus group processes. Groups were given the following description of purpose and activity: (a) the purpose was to verify or adjust their personal rating through discussion in a group, (b) there was a 60-min time limit, (the 30-min spent completing the survey was included), (c) discussion was audio recorded by the student researcher for note-taking, and (d) the group was not bound to reach consensus. Each focus group reacted to the transition timeline by comparing rating of skills that should develop along a

continuum of 6th through 12th grades (or, for parents, age 12 to 18). The outcome was a list of recommendations from the focus groups for modifications in the timeline.

Data Collection and Analysis

The student researcher reviewed rating data and produced a median and range score for each item in the timeline. She also examined comments by replaying the focus group audio recording. Data based decisions were made according to the following rules:

- When the median ratings were low (1.5 or lower) and the range was small (1-2), the student researcher deleted the item on the importance timeline or moved the item on age/grade-appropriateness ratings.
- When the median ratings were low (1.5 or lower) and the range was large (1-4), the student researcher considered focus group recommendations to remove or keep the item on importance ratings, and move the item to recommendations on age/grade-appropriateness ratings.
- When the median ratings were (2.0 or higher) and the range was small (1-2), the student researcher rank ordered the item on importance rating and age/grade-appropriateness ratings.
- When the median ratings were (2.0 or higher) and the range was large (1-4), the student researcher rank ordered the item on importance rating and age/grade-appropriateness but considered recommendations to move items from focus group members.

The student researcher made changes based on data analysis and recommendations given by focus group members. Changes were made based on recommendations from participants, although when participants disagreed, greater deference was given according

to participants' expertise, (e.g., the middle-school focus group had a median score of 2 on importance of students touring a college campus, whereas the high school focus group put it as a 4, since the high school group has more experience with that, the student researcher kept the ranking high for that item). Items were rank ordered in importance and age/grade-appropriateness according to ratings and a transition timeline was created for both parents and teachers.

Follow-up

The student researcher emailed the finished product with a survey (Appendix C) to each participant. Instructions consisted of reviewing the product and providing feedback, either overall or in regards to specific items. The student researcher recorded feedback received from the participants and data were analyzed to produce a median and range of the value of the transition timeline as a resource. For participation, each participant received the finished product to use as a resource.

RESULTS

Results from this study are described in relation to the research questions. First, as shown in Table 2, the student researcher presents data on median and range of importance of highest overall ranked items throughout grades 6-12 by middle and high school teacher focus groups. Second, subsequent tables show median and range data on school timelines (i.e., teachers) for grade-appropriateness throughout grades 6-12 and each sequence of grades, followed by home timelines (i.e., parents) of importance and age-appropriateness for ages throughout then each sequence of age. Evidence-based skill/activities are identified in the tables by an asterisk. Third, the student researcher

presents data from teachers and parents in regards to the home survey on importance and age-appropriateness. Fourth, in the context of the timeline data, the student researcher discusses items that were the focus of discussion in the focus groups, including items that were eliminated.

Table 2

Median and range of importance ratings of highest overall ranked items throughout grades 6-12 by middle and high school teacher focus groups

<i>Importance</i>	<u>Middle-School</u>	<u>High school</u>
Item	Mdn (Range)	Mdn (Range)
Throughout Grades 6-12		
*Participates in core general education classes as much as possible.	4 (4)	4 (4)
* Participates in general education math classes as much as possible, (students attending Utah College need to pass math 1010)	4 (4)	4 (4)
Demonstrates appropriate social skills across settings	4 (3-4)	4 (4)
* Learns Self-Advocacy Strategy (e.g., asks teachers to clarify assignments)	4 (3-4)	4 (4)
*Attends meeting for Individualized Education Program (IEP)	4 (3-4)	4 (3-4)
Attends Student Educational Occupational Plan (SEOP) when starts	4 (3-4)	4 (3-4)
Comes prepared for each class (e.g., pencil, paper, text, completed assignments)	4 (3-4)	4 (3-4)
Demonstrates good attendance and punctuality	4 (3-4)	4 (3-4)
Follows rules, routines and procedures for each class	4 (3-4)	4 (3-4)
Takes core exams	3 (3-4)	4 (3-4)
Learns decision making skills	3 (3-4)	4 (3-4)
*Participates in social skills training if needed (e.g., accepting "no" for an answer)	3 (2-4)	4 (3-4)
Increases skills using technology (e.g., using Microsoft PowerPoint)	4 (2-4)	3 (3-4)

Thirteen individuals participated in separate focus groups consisting of (a) parents ($n=5$), (b) middle-school teachers ($n=5$), and (c) high school teachers ($n=3$). Overall, 97% of all items obtained a median score of at least 3 from teachers in importance and grade-appropriateness. Moreover, 96% of all items obtained a median score of at least 3 from parents on both variables. These findings indicate consensus across all focus groups on importance and appropriateness of items.

School timeline: Importance ratings grades across the sequence of grades (i.e., grades 6-12). As shown in Table 2, the combined grades 6-12 timeline presents items considered important across all grades. The top rated items, all rated “4”, were *participates in core general education classes as much as possible* and *participates in general education math classes as much as possible*. Items were mostly rated very high with 9 of 14 items having a median of 4 from both focus groups. The ranges were also mostly narrow and high with 9 of 14 items having a range of at least (3-4) from both groups. The middle-school group had a median of 3 for three items (*takes core exams*, *learns decision making skills*, *participates in social skills training if needed*) and the high school group had a median of 3 for one item (*increases skills using technology (e.g., using Microsoft PowerPoint®)*). Interestingly, an item about the importance of *social skill training* had a median of 3 and range of (2-4) from the middle-school group, although on the item about the importance of *demonstrating appropriate social skills across settings* was rated much higher with a median and range of 4. The focus group suggested that the social skill training item be reworded to include the phrase, "if needed."

Table 3

Median and range of importance ratings of each item for grades in sequence by middle and high school teacher focus groups

	Middle-School	High school
Item	Mdn (Range)	Mdn (Range)
Grades 6-8		
Understand assignment expectations	4 (4)	4 (4)
Memorizes class schedule, locker combination, student number, and password for school website	4 (3-4)	4 (4)
Follows one-step, two-step, and multi-step directions	4 (3-4)	4 (4)
Writes assignments in a daily planner, uses an assignment calendar, and keeps a homework binder	4 (2-4)	4 (4)
Independently contacts teachers about missing work	4 (3-4)	4 (3-4)
Participates in Individualized Education Program (IEP) by making introductions	4 (3-4)	4 (2-4)
Attends career and technical education classes (CTE) when beginning 7th grade	4 (2-4)	4 (3-4)
Demonstrates acceptable hygiene	4 (4)	3 (3-4)
*Understands safety skills (e.g., Internet safety)	4 (3-4)	3 (3-4)
Demonstrates respect for own and other's property	4 (2-4)	3 (3)
Takes several inventories including interest, learning style, etc.	3 (2-3)	4 (3-4)
Keeps work area and locker clean	3 (2-4)	3 (2-3)
Participates in Reality Town Activity (through simulation the student experiences adult financial responsibilities and choices)	3 (2-4)	3 (2-3)
Demonstrates ability to set SMART goals (specific, measurable, attainable, realistic, timely)	3 (1-4)	3 (2-4)
* Participates in @Check and Connect if needed (the student daily checks in with an adult for behavior and /or academic concerns)	2 (2-3)	3 (3)

Explores careers through videos from Utah Futures	2 (2-3)	3 (2-4)
9th -10th Grade		
Participates in Individualized Education Program (IEP) by making introductions, sharing career goals, strengths, weaknesses, accommodations, and how those accommodations effect performance	4 (3-4)	4 (4)
Review credit history towards graduation at SEOP	4 (3-4)	4 (4)
*Independently correctly completes a job application	4 (3-4)	4 (4)
Applies to technical college prior to 11th grade (e.g., Davis Applied Technology College)	4 (2-4)	4 (4)
Identifies factors that will affect retention and promotion on the job site	4 (1-4)	4 (4)
*Learns job-related social communication skills	4 (3-4)	4 (3-4)
Identifies requirements for applying to technical college	4 (2-4)	4 (3-4)
Enrolled in vocational education courses at the high school	4 (2-4)	4 (2-4)
Discusses enrollment at a technical college concurrently with high school if interested	4 (1-4)	4 (2-4)
Demonstrates understanding of the level of education needed for various careers	3 (2-4)	4 (4)
Takes career inventories	3 (3-4)	4 (3-4)
Participates in a mock job interview	3 (2-4)	4 (3-4)
Identifies job requirements, (e.g., get food handlers permit to work at a restaurant)	3 (2-4)	4 (3-4)
* Creates a resume using a template	3 (2-3)	4 (3-4)
*Begins career portfolio	3 (3-4)	4 (2-4)
Obtains drivers permit if the state allows and can independently use public transportation	3 (2-3)	4 (2-4)
Demonstrates understanding of time management	4 (3-4)	3 (3-4)
Tours vocational school	4 (2-4)	3 (3-4)
Demonstrates understanding of the GPA and ACT scores required for admission to state colleges	4 (2-4)	3 (3-4)
Demonstrates understanding of what open enrollment college means	4 (2-4)	3 (2-3)

Identifies the remunerative, personal, and social benefits met through work	4 (1-4)	3 (3-4)
Contacts teachers "prior" to missing work	3 (3-4)	3 (3-4)
Locates sources of occupational & training information	3 (2-4)	3 (3-4)
Attends transition fairs	3 (2-4)	3 (3-4)
Prioritizes assignments with lists	3 (2-4)	3 (3)
Participates in Job Shadow Activity if allowed (student goes to a prearranged job site to observe what the job entails)	3 (2-4)	3 (2-4)
Demonstrates comprehension of graduation credits during student education occupational plan (SEOP)	3 (2-3)	3 (2-4)
11th Grade		
Review credit history towards graduation and ACT application during SEOP	4 (3-4)	4 (4)
*Adds to career portfolio, (resume and reference list)	4 (3-4)	4 (4)
Takes ACT test	4 (3-4)	4 (3-4)
* Participates in Self-directed IEP with Vocational Rehabilitation attending, (student directs the IEP and the vocational rehabilitation counselor participates)	4 (3-4)	4 (3-4)
*Demonstrates self-management for employment skills, (e.g., initiates tasks)	4 (3-4)	4 (3-4)
Registers for ACT with accommodations	4 (2-4)	4 (3-4)
Identifies how disability affects employment	4 (2-4)	4 (3-4)
Identifies how accommodations affect employment	4 (2-4)	4 (3-4)
Takes ACT preparation class	4 (2-4)	4 (2-4)
Identify requirements for enrolling in college	4 (3-4)	3 (3-4)
Maintains work habits when unsupervised	4 (3-4)	3 (3-4)
Adapts to change in the work environment	4 (3-4)	3 (3-4)
Meets the demand of quality work	4 (3-4)	3 (3-4)
Works at a satisfactory rate	3 (3-4)	3 (3-4)
Learns job specific employment skills (e.g., greeting prospective customers)	3 (3-4)	3 (3-4)
12th Grade		
Obtains summary of performance documents	4 (3-4)	4 (4)
Enroll in Financial Literacy and/or Adult Roles classes	4 (2-4)	4 (4)
Completes applications for college admissions	4 (3-4)	4 (3-4)
Understands information on a pay stub	4 (3-4)	4 (3-4)
Obtains necessary documentation for disability	4 (2-4)	4 (3-4)

resource center at post secondary settings		
Participate in College Tour Day at school, get applications	2 (2-4)	4 (4)
Demonstrates how, when, and where to independently disclose his/her disability, and when NOT to disclose a disability	4 (2-4)	4 (3-4)
*Participates in self-directed IEP, student determines graduation or extended transition, if 18 student signs IEP	4 (3-4)	4 (2-4)
Retakes ACT Test	4 (2-4)	4 (2-4)
Increase skills using assistive technology in preparation for college (e.g., becoming fluent in using a Smart Pen)	4 (3-4)	3 (2-4)
Contacts agencies for support, (postsecondary disability resource centers, vocational rehabilitation)	4 (2-4)	3 (3-4)
*Participates in internship or apprenticeship	4 (2-4)	3 (2-4)
Understands federal and state income tax	4 (2-4)	3 (2-4)

School timeline: Importance ratings across the sequence of grades. Table 3 describes the median and range of importance ratings of each item for grades in sequence by middle and high school teachers. When some items were rated differently and rank order was questioned, for example, if the middle-school had a median and range rating of 4 (3-4) whereas high school had a median rating of 3(3-4), the middle-school median rating was used because they were assumed to have more expertise with grades 6-8. The items were mostly rated high in importance by both groups.

Grades 6-8 had 17 items listed. One was deleted (*emailing parents grades*), based on middle-school focus group recommendation. Seven items were rated very high from both groups with a median of 4 and a range of at least 3 to 4. Seven items were rated high to very high with at least a median of 3. Lastly, two items were rated lowest from the middle-school focus group with a median of 2, including *career exploration* and *using a strategy*. The middle-school focus group recommended that these strategies be reworded with the phrase "if needed".

Grades 9-10 had 28 items, one was deleted (*attending vocational classes*) since both focus groups thought it was redundant with another item. Nine items had a very high median score of 4 from both groups with generally narrow and high ranges. The remainder of the items had high median scores of at least 3. Ranges varied from 2 to 4 on all items. There were no low median scores.

Table 4

Median and range of grade-appropriate ratings of highest overall ranked items throughout grades 6-12 by middle and high school teacher focus groups

	Middle-School	High school
Item	Mdn (Range)	Mdn (Range)
Throughout Grades 6-12		
*Participates in core general education classes as much as possible.	4 (4)	4 (4)
* Participates in general education math classes as much as possible, (students attending Utah College need to pass math 1010)	4 (4)	4 (4)
Takes core exams	4 (3-4)	4 (4)
Increases skills using technology (e.g., using Microsoft PowerPoint)	4 (3-4)	4 (4)
*Attends meeting for Individualized Education Program (IEP)	4 (3-4)	4 (4)
Attends Student Educational Occupational Plan (SEOP) when starts	4 (2-4)	4 (4)
Comes prepared for each class (e.g., pencil, paper, text, completed assignments)	4 (2-4)	4 (4)
Learns decision making skills	3 (3-4)	4 (4)
* Learns Self-Advocacy Strategy (e.g., appropriately expresses likes & dislikes)	3 (3-4)	4 (4)
*Participates in social skills training if needed (e.g., accepting "no" for an answer)	3 (2-4)	4 (4)
Demonstrates appropriate social skills across settings	3 (2-4)	4 (4)

Grade 11 had 15 items listed. All items were rated high to very high with median scores of 3 or higher with ranges of 3 to 4. The item *obtaining a drivers permit* received a great deal of discussion from both focus groups for both pro and con. Groups determined that this item should be reworded with two phrases "if the state allows" and "can independently use public transportation."

Grade 12 had 13 items listed. All but one item was rated high to very high with median scores of 3 or higher and ranges of 3 to 4 (*exception=participate in College Tour Day at school, get applications*). Conversely, the high school group rated the same item with a median score of 4 and range score of 4. The student researcher rank-ordered the item according to the high school focus group's rating.

School timeline: Grade-appropriate ratings across the sequence of grades.

Table 4 describes the median and range of grade-appropriate ratings throughout grades 6-12 by middle and high school teachers. The two highest items in grade-appropriateness ratings were also the highest items in importance ratings (i.e., *participates in core general education classes as much as possible* and *participates in general education math classes as much as possible*). Eleven items were rated by the high school focus group very high with median scores of 4 and range scores of 4. The middle-school focus group rated 7 of the 11 items with median scores of 4. The data suggested that most focus group participants believed that these skills/activities should be taught throughout the grades. Table 4 describes the median and range of grade-appropriate ratings throughout grades 6-12, by middle and high school teacher focus groups.

Table 5

Median and range of grade-appropriate ratings of each item for grades in sequence by middle and high school teacher focus groups

	Middle-School	High school
Item	Mdn (Range)	Mdn (Range)
Grades 6-8		
Demonstrates acceptable hygiene	4 (4)	4 (4)
Follows one-step, two-step, and multi-step directions	4 (3-4)	4 (4)
Independently contacts teachers about missing work	4 (3-4)	4 (4)
Memorizes class schedule, locker combination, student number, and password for school website	4 (2-4)	4 (4)
Writes assignments in a daily planner, uses an assignment calendar, and keeps a homework binder	4 (2-4)	4 (4)
*Understands safety skills (e.g., Internet safety)	4 (3-4)	4 (3-4)
Participates in Individualized Education Program (IEP) by making introductions	4 (3-4)	4 (3-4)
Understand assignment expectations	4 (3-4)	4 (3-4)
Demonstrates respect for own property and others	4 (2-4)	4 (3-4)
Attends career and technical education classes (CTE) when beginning 7th grade	4 (2-4)	4 (3-4)
Takes several inventories including interest, learning style, etc.	3 (3-4)	4 (3-4)
Keeps work area and locker clean	3 (2-4)	4 (3-4)
Explores careers through videos from Utah Futures	3 (2-4)	4 (2-4)
Participates in Reality Town Activity (through simulation the student experiences adult financial responsibilities and choices)	3 (2-4)	3 (3-4)
* Participates in @Check and Connect if needed (the student daily checks in with an adult for behavior and /or academic concerns)	3 (2-4)	3 (3-4)
Demonstrates comprehension of graduation credits	3 (2-3)	3 (3-4)

during student education occupational plan (SEOP)		
Demonstrates ability to set SMART goals (specific, measurable, attainable, realistic, timely)	3 (1-4)	3 (3-4)
9th -10th Grade		
Participates in Individualized Education Program (IEP) by making introductions, sharing career goals, strengths, weaknesses, accommodations, and how those accommodations effect performance	4 (3-4)	4 (4)
Review credit history towards graduation at SEOP	4 (3-4)	4 (4)
Identifies the remunerative, personal, and social benefits met through work	4 (3-4)	4 (4)
Takes drivers training if the state allows it or can independently use public transportation	4 (3-4)	4 (4)
Obtains drivers permit	4 (2-4)	4 (4)
Identifies factors that will affect retention and promotion on the job site	4 (1-4)	4 (4)
Demonstrates understanding of time management	4 (3-4)	4 (3-4)
*Learns job-related social communication skills	4 (3-4)	4 (3-4)
Demonstrates understanding of the GPA and ACT scores required for admission to state colleges	4 (2-4)	4 (3-4)
Identifies job requirements, (e.g., get food handlers permit to work at a restaurant)	4 (2-4)	4 (3-4)
*Begins career portfolio	4 (2-4)	4 (3-4)
Demonstrates understanding of the level of education needed for various careers	3 (2-4)	4 (4)
Tours vocational school	4 (3-4)	4 (2-4)
*Independently correctly completes a job application	4 (3-4)	4 (2-4)
Participates in Job Shadow Activity, (student goes to a prearranged job site to observe what the job entails)	4 (3-4)	4 (2-4)
* Creates a resume using a template	4 (3-4)	4 (2-4)
Participates in a mock job interview	4 (3-4)	4 (2-4)
Identifies requirements for applying to technical college	4 (3-4)	4 (2-4)
Enrolled in vocational education courses at the high	4 (3-4)	4 (1-4)

school		
Prioritizes assignments with lists	4 (2-4)	4 (3-4)
Discusses enrollment at a technical college concurrently with high school	4 (1-4)	4 (2-4)
Contacts teachers "prior" to missing work	3 (3-4)	4 (3-4)
Locates sources of occupational & training information	3 (2-4)	4 (3-4)
Applies to technical college (e.g., Davis Applied Technology College)	3 (1-4)	4 (1-4)
Demonstrates understanding of what open enrollment college means	2 (2-4)	3 (2-3)
11th Grade		
Review credit history towards graduation and ACT application during SEOP	4 (3-4)	4 (4)
Identify requirements for enrolling in college	4 (3-4)	4 (4)
* Participates in Self-directed IEP with Vocational Rehabilitation attending, (student directs the IEP and the vocational rehabilitation counselor participates)	4 (3-4)	4 (4)
*Adds to career portfolio, (resume and reference list)	4 (3-4)	4 (4)
Identifies how disability affects employment	4 (3-4)	4 (4)
Identifies how accommodations affect employment	4 (3-4)	4 (4)
*Participates in career awareness class or work study program	4 (3-4)	4 (3-4)
Adapts to change in the work environment	4 (3-4)	4 (3-4)
*Demonstrates self-management for employment skills, (e.g., initiates tasks)	4 (3-4)	4 (3-4)
Takes ACT preparation class	4 (3-4)	4 (3-4)
Registers for ACT with accommodations	4 (3-4)	4 (3-4)
Takes ACT test	4 (3-4)	4 (3-4)
Maintains work habits when unsupervised	4 (2-4)	4 (3-4)
Meets the demand of quality work	4 (4)	3 (3-4)
Learns job specific employment skills (e.g., greeting prospective customers)	3 (3-4)	3 (3-4)
12th Grade		
Obtains summary of performance documents	4 (3-4)	4 (4)
Participate in College Tour Day at school, get applications	4 (3-4)	4 (4)
Increase skills using assistive technology in preparation for college (e.g., becoming fluent in using a Smart Pen)	4 (3-4)	4 (4)

Retakes ACT Test	4 (3-4)	4 (3-4)
Obtains necessary documentation for disability resource center at post secondary settings	4 (3-4)	4 (3-4)
Contacts agencies for support, (postsecondary disability resource centers, vocational rehabilitation)	4 (3-4)	4 (3-4)
Completes applications for college admissions	4 (3-4)	4 (3-4)
*Participates in self-directed IEP, student determines graduation or extended transition, if 18 student signs IEP	4 (2-4)	4 (3-4)
Enroll in Financial Literacy and/or Adult Roles classes	4 (3-4)	4 (2-4)
*Participates in internship or apprenticeship	3 (2-4)	4 (3-4)
Understands information on a pay stub	4 (3-4)	4 (2-4)
Understands federal and state income tax	4 (2-4)	3 (2-4)
Demonstrates how, when, and where to independently disclose his/her disability, and when NOT to disclose a disability	4 (3-4)	3 (2-4)

School timeline: Grade-appropriate rating grades in sequence of grades.

Table 5 describes median and range of grade-appropriate ratings of each item for grades in sequence by middle and high school teachers. Generally, items received high median and high range scores. Grades 6-8 had high to very high median scores of 3 and 4 with mostly narrow and high range scores for age-appropriateness. One item (Demonstrates ability to set SMART goals) had a wide range of 1 to 4, but a median of 3 with two participants rating the item 3 and the other two participants rating the item four. During the discussion, the participant who rated the item “1” thought middle-school was too early for students to make SMART goals, but since the rest thought it was age-appropriate, the item remained. Grades 9-10 had high to very high median scores of 3 and 4 with generally high and narrow on range scores of 3 to 4 on most items. Three items were questioned by focus group participants in both groups concerning (a) when a

student should apply for technical school, (b) what was meant by "vocational education classes", and (c) discussion of concurrent enrollment. The group determined during discussions that (a) although students are not allowed to attend during 10th grade, the application process should start by the spring of 10th grade; (b) for the item that states, "enrolled in vocational education classes," a phrase was added "in high school;" and (c) it is important to discuss concurrent enrollment in 10th grade for planning purposes. Grade 11 had very high scores overall, with 13 items out of 15 scoring a median of 4 from both focus groups. There were three items with median scores of 3. Range scores were also very high and narrow indicating agreement on items as grade-appropriate. Grade 12 had very high scores likewise, with 10 items out of 13 scoring a median of 4 from both focus groups. Additionally, there were three items with median scores of 3. Range scores were generally high with narrow ranges although two items were rated by the high school focus group with a wide range of 2 to 4. That is, one participant did not agree with grade-appropriateness of *understanding state and federal income tax*, and *demonstrating how to disclose a disability*.

Home timeline: Age-appropriate ratings across ages 11-18. Table 6 describes median and range of both importance and age-appropriate ratings of highest overall ranked items across ages 11-18 by the parent focus group. The highest ranked item was *participates in community activities that help build goal setting, self-determination, work ethic, self-discipline, and social skills*. Generally, all items were ranked high to very high on age appropriateness throughout ages 11-18, with median scores of 3 and 4. There were low and wide range scores on five of eight items on both importance and age appropriateness, indicating one or two participants in the group did not agree with the

Table 6

Median and range of both importance and age-appropriate ratings of highest overall ranked items throughout ages 11-18 by parent focus group

<u>Home Timeline</u>	<u>Importance</u>	<u>Age-appropriate</u>
<u>Item</u>	<u>Mdn (Range)</u>	<u>Mdn (Range)</u>
Ages 11 throughout 18		
Participates in community activities that help build goal setting, self-determination, work ethic, self-discipline, and social skills such as: Scouts, 4-H club, music and dance lessons, sports etc.	4 (4)	4 (4)
Follows rules and routines at home	4 (2-4)	4 (2-4)
Takes responsibility for mistakes, (e.g., if child spills milk, he cleans it up)	4 (2-4)	4 (2-4)
Returns personal items where they belong	4 (2-4)	3 (2-4)
Earns privileges (e.g., before he can play, he has to feed the dog)	3 (3-4)	3 (3-4)
Earns money toward a desired item or partially earns it (e.g., earns money towards the purchase of a bike)	3 (3-4)	3 (3-4)
Earns allowance compensatory for the type and amount of work done (e.g., child gets more money, not because he is older, but because he mows the lawn in addition to keeping his bedroom clean)	3 (1-4)	3 (1-4)
Earns allowance for work done correct and complete	3 (1-3)	3 (1-3)

majority. A participant who rated items low in both importance and age-appropriateness commented that some of the items just were not important or age-appropriate for his child's particular disability (*earns allowance compensatory for the type and amount of work done and earns allowance for work done correct and complete*). The items were not removed because of the high median scores.

Table 7

Median and range of both importance and age-appropriate ranked highest according to importance for ages in sequence by parent focus group

Home Timeline	Importance	Age-appropriate
Item	Mdn (Range)	Mdn (Range)
Age 11-13		
*Practices personal safety skills at home (e.g., using the internet)	4 (3-4)	4 (3-4)
Exhibits daily grooming and hygiene	4 (3-4)	4 (2-4)
*Correctly counts out money and determines change when purchasing items (banking)	4 (3-4)	4 (2-4)
*Begins personal saving account with parent, (banking)	4 (2-4)	4 (2-4)
Appropriately introduces adults to each other, making eye contact, and speaking clearly (e.g., introduces parents to teachers)	4 (2-4)	4 (2-4)
Demonstrates care for personal property and other's property	4 (2-4)	4 (2-4)
Independently dresses for the occasion	4 (2-4)	4 (2-4)
*Independently purchase meals from restaurants	4 (2-4)	4 (1-4)
Uses a student planner and completes homework with fewer than three prompts (prompts are parent reminding the child)	4 (1-4)	4 (1-4)
Follows multiple-step directions (e.g., "rinse the dishes, load and unload the dishwasher")	3 (3-4)	4 (3-4)
*Choosing between a range of acceptable choices (teach child decision making skills)	3 (3-4)	3 (3-4)
Demonstrates knowledge of physical fitness, nutrition, and weight	3 (2-4)	4 (2-4)
Develops routines for time management	3 (2-4)	4 (2-4)
* Prepares meal items with supervision and then independently	3 (2-4)	3 (1-4)
Age 14-16		
*Participates in neighborhood work experiences (e.g., babysitting, lawn care, dog	4 (3-4)	4 (4)

walking, etc.)		
Develops job-related communication skills e.g. customer service etiquette	4 (3-4)	4 (3-4)
Demonstrates how to ask for clarification appropriately (e.g., to appropriately ask the teacher to further explain instructions)	4 (3-4)	4 (3-4)
Studies in peer groups, independently completes homework, parents continue to monitor grades	3 (3-4)	3 (3-4)
*Independently maintains care of clothes	3 (3)	3 (3-4)
Participates in extracurricular activities at school (e.g., band, color guard, theater, athletics, and clubs)	3 (2-4)	4 (3-4)
Helps with household repair (e.g., painting, changing a door knob)	3 (2-4)	4 (2-4)
Independently uses public transportation and can find their way around his/her community	3 (2-4)	4 (1-4)
*Determines personal budget including a savings goal	3 (2-4)	3 (3-4)
Independently shops for meal items	3 (2-4)	3 (1-4)
*Independently prepares balanced meal for family	3 (2-3)	3 (1-4)
Participates in several community service activities such as volunteering at a shelter	3 (1-4)	3 (1-4)
Participates in a summer practicum at a technical school (The DATC sponsors a "free" summer practicum that lasts a week to "try out" some of their programs starting at age 14)	2 (2-3)	2 (2-4)
Age 16		
Independently completes household chores and homework without being asked	4 (4)	4 (4)
Discuss with child financial responsibility for vocational/college education (who will pay for what)	4 (3-4)	4 (4)
Obtain drivers permit, take drivers education, and take the drivers test	4 (3-4)	4 (4)
Independently completes job application	4 (3-4)	4 (3-4)

correctly		
*Participates in summer employment	4 (3-4)	4 (3-4)
Determines pros/cons of postsecondary career pathway and discusses these with parent.	4 (3-4)	4 (3-4)
Assure work related documents are available for child (e.g. Social security number, birth certificate, workers permits if applicable)	4 (2-4)	4 (3-4)
Determine responsibility for automobile (e.g., gas, car maintenance, and insurance with good grade discount)	3 (3-4)	4 (3-4)
Determine the need for social security disability benefits, vocational rehabilitation services etc.	3 (2-4)	4 (2-4)
Demonstrate car maintenance skill (i.e., checking fluids, tire pressure, changing flat tires)	3 (2-4)	3 (2-4)
* Understands credit, opens a checking account.	2 (2-4)	3 (2-4)
Age 17		
Tours college/technical schools with parents	4 (4)	4 (4)
*Determines postsecondary path	4 (3-4)	4 (4)
Applies for admission to college or technical school	4 (3-4)	4 (4)
*Participates in part-time employment including apprenticeship or internship	4 (3-4)	4 (3-4)
Registers for American College Test (ACT) and test retakes.	4 (2-4)	4 (2-4)
Applies for vocational rehabilitation and other agencies if needed (with parent support)	4 (2-4)	4 (2-4)
Obtains documentation of disability	3 (2-4)	3 (2-4)
Age 18		
Contacts disability resource center of post-secondary educational setting attending to determine required documents	4 (3-4)	4 (3-4)
Applies for Student aid (FAFSA)	4 (3-4)	4 (3-4)
Registers to vote	4 (2-4)	4 (2-4)
Registers for selective services	4 (2-4)	4 (2-4)
Review health insurance coverage with child	4 (2-4)	4 (2-4)
Obtain documents: last IEP, Summary of Performance, High school transcripts, teacher recommendations	4 (2-4)	4 (2-4)

Home timeline: Importance and age-appropriateness rating for ages in sequence. Table 7 describes median and range of both importance and age-appropriateness across ages in sequence by parents. Ages 11-13 had nine items listed. Items had high to very high median scores of 3 and 4, although there were ranges as wide as 1 to 4 on three ratings for both importance and age-appropriateness (*prepares meal items with supervision and then independently, uses a student planner and completes homework with fewer than three prompts, independently purchase meals from restaurants*). These items were not removed because of high median scores.

Ages 14-16 had 13 items listed. Items had high to very high median scores of 3 and 4, although there were ranges as wide as 1 to 4 on one importance rating (*participates in several community service activities such as volunteering at a shelter*) and three age-appropriateness ratings (*independently shops for meal items, independently prepares balanced meal for family, participates in several community service activities such as volunteering at a shelter*).

Age 17 had 7 items with high median scores of 4 with one item having a median score of 3 for both importance and age-appropriateness ratings (*obtains documentation of disability*). This was the lowest rated item by parents overall.

Age 18 had six items with very high median scores of 4, although ranges were as wide as 2 to 4 on both importance and age-appropriateness (*register to vote, register for selective services, review health insurance coverage with the child, obtain documents [last IEP, summary of performance, high school transcripts, teacher recommendations]*).

Table 8

Median and range of participant survey of finished product

Survey Question	Rating Scales	Mdn	Range
How close is the finished product to your own personal ratings?	1. Very different 2. Some different 3. Mostly the same 4. The same	4	(2-4)
How complete is this timeline with critical skills and activities necessary for transitioning youth with high-incidence disabilities?	1. Missing critical elements 2. Missing a few critical elements 3. Mostly complete 4. Complete	3	(3-4)
If these skills and activities are taught to youth, how prepared will they be for college?	1. Not prepared 2. A little prepared 3. Mostly prepared 4. Very prepared	4	(3-4)
If these skills and activities are taught to youth, how prepared will they be for independent living, and employment?	1. Not prepared 2. A little prepared 3. Mostly prepared 4. Very prepared	4	(3-4)
How likely will this timeline be used as a resource for future transition planning?	1= Never 2= Seldom 3=Often 4= Always	3	(3-4)

Focus group member comments. Members in the parent focus group made several comments about self-determination, self-advocacy, accountability, and responsibility. One participant said, "Although my son used accommodations, he never used them as a crutch." Conversely, another participant who consistently had the low score on the range of items commented that based on his son's disabilities some of the skills/activities were not important nor age-appropriate, although his son received a bachelors degree in computer science. It is important to consider the individual when considering the disability. On the transition timeline there is a qualification which states,

"according to the child/student's strengths, weaknesses, and interests." Likewise, not all student's postsecondary education should be college. Some students are interested in vocational education. A focus group participant said that her daughter struggled in a college setting, "she learned a different way," her daughter was very successful in a vocational education setting.

Survey of the finished product. The focus group participants who responded to the survey included the high school focus group, three members of the middle-school group (n=5), and three members of the parent group (n=5). All items received a high to very high score median score of 3 and 4. They responded to the refined timeline favorably, agreeing that it would be a valuable resource for the teachers and parents of transitioning youth with high-incidence disabilities. Also, the student researcher asked each focus group what item/activities to delete or combine to "streamline it" the overwhelming response was do not change it.

DISCUSSION

This study sought to develop and refine a timeline with skills and activities for children with high-incidence disabilities starting from 6th through 12th grade. Results showed that most timeline items were rated as important and age/grade-appropriate. Agreement was found on some items across age and grades, particularly *participates in core general education classes as much as possible* and *participates in general education math classes as much as possible*. As such, the student researcher assumes that this group of teachers and parents placed high value on having students with disabilities involved in inclusive, integrated academic activities as a requisite to transition. Most items within age

and grade groups were consistent in rankings of importance and age-appropriateness. Both the school and home timelines appear to contain items viewed as important and age-appropriate for youth in transition.

Timeline items with high range scores suggest disagreements among teacher focus group members as the importance and/or age/grade-appropriateness of items. Several items evidenced high range scores (e.g., Importance at Grades 6-8: *Demonstrates ability to set SMART goals*; Importance at Grades 9-10: *Identifies factors that will affect retention and promotion on the job site*; Importance at Grades 9-10: *Discusses enrollment at a technical college concurrently with high school if interested*; Importance at Grades 9-10: *Identifies the remunerative, personal, and social benefits met through work*; Age-appropriateness at Grades 9-10: *Demonstrates ability to set SMART goals*; *Identifies factors that will affect retention and promotion on the job site*; *Discusses enrollment at a technical college concurrently with high school*). Disagreements are not surprising but suggest the need for education and discussion among educators. Ultimately, a high level of consensus should be achieved among transition teachers across all secondary grades.

Parent disagreements may suggest a variety of issues, including differences in values across families or cultures, or relational issues between the parent and his/her child with a disability. Several timeline items evidenced high range scores among parents (e.g., *Earns allowance compensatory for the type and amount of work done*, *Earns allowance for work done correct and complete*, *Independently purchase meals from restaurants*). Teachers should acknowledge these differences and attend closely to parent perspectives when setting goals for transition plans.

Implications

Teachers and parents can use a timeline as starting points for skills/activities as they prepare youth for transitioning into adulthood. Given the limited number of existing timelines in the transition literature, this study fills a void and provides guidance to teachers and parents. Moreover, the timelines are based on ratings from practitioners to provide at least some degree of empirical justification for importance and placement of items. The applications are numerous. First, pre-service teacher programs could use the timeline to guide student teachers in transition lesson planning, (e.g., prepare lesson plans on interviewing skills for student instruction). Furthermore, districts could use the timeline to help shape policy, (e.g., visits with vocational rehabilitation during 11th grade). Additionally, parents could receive the timeline during back to school meetings, parent trainings on transition, during transition fairs, or before an Individual Education Program (IEP) meetings to coordinate goal planning, (e.g., the student's IEP goal concerning assignment organization, could be complimented with the the parent checking the completion of the student's planner). These are only a few ways the timeline may be used.

Limitations

This study has weaknesses that limit generalizability, including those related to its construction and sample. First, construction of the timelines was not exclusively based on evidence-based practice. Some non-research items were included based on recommendations of teachers. The construction of the timelines should not imply that all students with high-incidence disabilities must complete all items. Additional research is necessary to determine the extent to which completion of timeline items results in

improved post-school outcomes. Second, sample limitations warrant discussion. The teacher and parent samples were extremely small. Results from this project were obtained based on parents who were middle to high-middle class with college degrees, and therefore, have no generalization to parents of other strata. Further, teachers came from one school district. The results may have been entirely different in another district. Results are not intended to suggest generalization to the population of students with high-incidence disabilities. Instead, results should spur interest in others to replicate this study.

Future Refinement

The next logical step in the refinement of this transition timeline is to replicate this creative project by using a larger number of participants. The focus group comprised of adults with high-incidence learning disabilities who have graduated from a post-secondary setting should be added. Also, the timeline should be modified to a checklist for the child/student that is written in the first person, (e.g., I can prioritize assignments using lists). As it was pointed out to the student researcher, students do what matters to them. Another refinement to the transition timeline would include additional evidence-based practices of skills/activities as they become identified, furthermore as promising practices are identified they should also be included as timeline items. Additionally, the transition timeline could be further refined to support a vocational or college track. This timeline is a starting point for parents, teachers, schools, and districts, and is meant to be modified or adapted by those who use it.

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