

Mental models of education, teaching and learning in Vermont:

Summary of findings from the Communicating School Redesign Community Survey

Dr. Catharine Biddle
Research Associate

D. J. Willower Center for Research in Leadership and Ethics
The Pennsylvania State University

INTRODUCTION

In the 2013 spring legislative session, the Vermont Senate approved and passed Act 77, entitled the Flexible Pathways Initiative. The focus of the legislation was the requirement that flexible pathways to credit fulfillment and graduation be made available to all Vermont students and that students be required to create, in partnership with their teachers and parents, a personal learning plan that would support their ability to take advantage of these newly available alternatives in supporting their learning.

In the fall of 2013, a team of youth and adults enrolled in UP for Learning's Communicating School Redesign Using a Youth-Adult Partnership Lens course identified the need for a statewide communication plan to support the implementation of Act 77. Participants of the course drew on current research on adult mental models of education conducted by the Frameworks Institute and conducted parallel research through interviews with 40 youth across four schools to determine existing mental models of youth about education, teaching and learning. Their findings from this project confirmed the need for a communication strategy that supported the shifting of youth and adult mental models around the purpose of education, the scope of education, current research on teaching and learning and beliefs about intelligence and motivation.

In order to design communication strategies that were effectively differentiated for various stakeholder groups within Vermont's communities, in 2014 UP for Learning's Communication for School Redesign Initiative conducted a survey of 579 students, educators, parents and community members in five high schools geographically dispersed across Vermont. The 15 question survey was designed to measure the divergence of the mental models of education, teaching and learning of these identified stakeholder group from beliefs which would support the effective implementation of Act 77. Stakeholder responses to the survey were evaluated using a "Public Understanding and Support Assessment Rubric" which was developed by youth-adult evaluation teams participating in the CSR Initiative based on research in the field of communication for social change.

Stakeholder group mental models were classified at levels of "pre-awareness", "awareness", and "understanding" depending on the demonstrated agreement or support for concepts and beliefs which were deemed to be necessary for the successful implementation of Act 77. These beliefs included the need for education to change to meet the needs of a rapidly changing society, for teaching methods to be aligned with current research, for students to be partners in learning and to move away from the "sage on the stage" method of teaching towards seeing teachers as coaches and guides. Additionally, a belief in the

importance of developing intrinsic motivation through relevance and self-directed and designed learning opportunities was identified as key, as well as a belief in the neuroplasticity of the brain and the understanding that intelligence is not fixed, but can grow through effort and the right kinds of support.

The goal of this research was to establish baseline information on the prevalence of these beliefs within Vermont's schools and communities in order to understand the future effectiveness of a communication strategy designed to shift these beliefs towards those which best support the successful implementation of Act 77.

METHODS

Youth-adult research teams from five high schools administered the CSR survey to their high schools and communities. These youth-adult teams were composed of administrators, faculty and students from each school. A summary of the characteristics of these schools and school populations as compared to the Vermont statewide averages can be found in Table 1 on page 3. In the following section, the survey's design, administration and analysis is described, and the limitations of the study design are discussed.

Survey instrument design

The survey instrument used to collect data on youth and adult mental models of education, teaching and learning related to Act 77 implementation consisted of 15 questions with statements related to their views and beliefs about education, teaching, and learning. Respondents were also asked to assess their own understanding of Act 77 and education reform efforts in Vermont. The survey was designed to measure respondents' beliefs based on previous research conducted by the Frameworks Institute and UP for Learning which used semi-structured interview protocols to map youth and adult mental models of education, teaching and learning (for a summary of findings from this work, see Biddle, Feinberg, and Beattie, 2014). Through these interviews, key belief structures were identified and questions for the survey were crafted to reflect these beliefs. A six-point Likert scale was used ranging from strongly agree to strongly disagree. For some questions, three options were used and respondents were asked to select which statement most accurately reflected their personal beliefs.

Sampling strategy and survey administration

Youth-adult research teams at each participating high school employed a convenience sampling strategy in administering their survey. Although teams aspired to a census of their school and broader community, limited access to particular populations during and after school hours, particularly in the case of parents and community members, was a significant barrier to obtaining wider participation in the survey. The survey itself was administered electronically to educators and students at all schools, while administration to parents and community members varied between schools with some choosing to administer the survey on paper and some providing a link to the survey through email. For the educator and student groups, a link to the survey was distributed via school email addresses. Table 2 reports the response rate from these efforts for the four categories of participant: educator, student, parent and community member.

Table 1. *Characteristics of schools participating in Communicating School Redesign Community Survey*

School Characteristics	Harwood Union	Hazen Union	Twinfield Union	Colchester	Otter Valley	Vermont (avg)
Locale code*	Rural, distant	Rural, remote	Rural, distant	Rural, fringe	Rural, distant	
HS Student enrollment*	519	236	113	727	354	
Faculty*	56 (HS)	31 (HS)	42 (K-12)	57 (HS)	44 (HS)	24 (HS)
% low-income students**	21%	49%	46%	20%	39%	39%
% non-white students**	4%	9%	10%	5%	4%	9%
% proficient or above on NECAP Reading Assessment**	57%	57%	79%	82%	62%	74%
% proficient or above on NECAP Math Assessment**	40%	11%	33%	53%	20%	38%
HS non-completion rate***	1%	3%	5%	1%	1%	2%

*Source: NCES Common Core Data, 2013-2014

**Source: Vermont Agency of Education School Report Data, 2013-2014

***Source: Vermont Agency of Education Public School Drop-out Data 2013-2014

Table 2. *Survey Respondents*

Stakeholder group	Total respondents
Educators	159
Students	266
Parents	82
Community members	72
Total	579

As a result of the barriers to accessing the parent and community member population, the parent and community member data has been excluded from this report as the groups concluded that it was too small of a sample to draw conclusions about the wider population of parents and community members in Vermont. The student and educator data, however, was considered by the groups to be robust. Table 3 shows the percentage of participation in the survey amongst students and educators across the five schools.

Table 3. *Response rate of students and educators by participating high school*

Survey Response Groups	Harwood Union	Hazen Union	Twinfield Union	Colchester	Otter Valley	Overall response rate
Students	76	90	36	39	107	28.5%
Educators	60	43	38	40	39	95%

As can be seen in Table 3, there is a discrepancy between the number of educators reported in state level data and the number of participating educators at certain schools, particularly Hazen Union and Harwood Union High Schools. School teams explained this difference through the inclusion of para-educators and middle school educators in single-building middle and high schools as part of their convenience sample.

Limitations of the study design

Several limitations weaken the conclusions that can be drawn from this data, though this report attempts to capitalize on the strengths of the data collection by focusing on the large number of student and educator respondents. First, the convenience sampling strategy employed by the youth-adult research groups means that although the diversity of characteristics present in their school populations may be represented, it is impossible to determine the extent to which this is true and the data may include unintentional bias towards educators and students who are more likely to participate in a survey, more likely to care about the topic being asked about, and/or may be over-representative of certain groups.

Additionally, while Vermont itself is a state that consists of a majority of rural schools, the rural location of all of the schools administering the CSR survey suggests a limited ability to draw conclusions from this data about populations not located within rural areas of Vermont. Lastly, the low response numbers collected from parents and community members has led to the exclusion of their data from this report. Further work must be done to determine these groups' beliefs regarding education, teaching and learning, and their knowledge of Act 77.

This report attempts to focus on the strengths of the collected data, which included a high educator response rate and an adequate student response rate. From these strengths in the data, limited

conclusions are presented at the end of the report about the state of both educator and student mental models of education, teaching and learning, and knowledge of Act 77. Further work must be done to determine the generalizability of these findings to other school contexts and communities within the state of Vermont.

Analytical methods

For the purpose of this report, descriptive statistics for the respondents overall and each of the stakeholder groups was compiled and then compared to the Public Understanding and Support Assessment Rubric. While the rubric contains five levels designed to assess the strength of support for beliefs compatible with the successful implementation of Act 77, only the first three levels were used to benchmark participant mental models of education for the purposes of this report (pre-awareness, awareness, and understanding). The latter two levels (engagement and support/advocacy) were not used because the survey tool was not designed to measure action, but rather structured as a beliefs inventory. As such, if the majority of a stakeholder group demonstrated strong belief or majority consensus around a particular belief, then that stakeholder group could be said to have “understanding” or to have “begun to shift their mental models of education and learning” and “become aware of the gap between this new knowledge and elements of the present system.” Similarly, a group could be said to be at pre-awareness if “this stakeholder group has little sense that there is any need for change” and “even if they are not content with the current system, they do not have the clarity or motivation to become involved in the change process.”

FINDINGS

The following section summarizes the descriptive statistics for the educator and student respondents overall with regard to the key beliefs identified as important to the implementation of Act 77. Additionally, profiles of the educator and student stakeholder groups were constructed to identify unique features of their mental models or trends in responses as compared to other stakeholder groups.

Summary of responses overall:

*Beliefs about education, teaching and learning and the need for change
(Q4, Q7, Q10, Q12, Q17)*

Respondents across both groups tended to answer similarly with regard to their views on the need for education to change. Almost universally, respondents agreed with the statement that education needs to change to keep pace with our rapidly changing world. The strength of this belief was similarly strong, with 66% of respondents either strongly agreeing or agreeing with this idea. However, when asked if a return to the basics (reading, writing and arithmetic) was the most effective approach to education, 70% of respondents agreed with this statement. The strength of this belief, however, was muted, with few respondents in any group strongly agreeing or strongly disagreeing with this idea. Rather, half of all respondents reported only somewhat agreeing or somewhat disagreeing with this statement, suggesting that feeling on this topic was likely mixed. **Therefore, while there is clear support for change within education, many of the respondents seem to lack strong beliefs as to the direction or nature of that change. However, the trend towards greater agreement with a return to the basics suggests a certain level of pre-awareness of beliefs which support the implementation of Act 77 within the majority of survey respondents.**

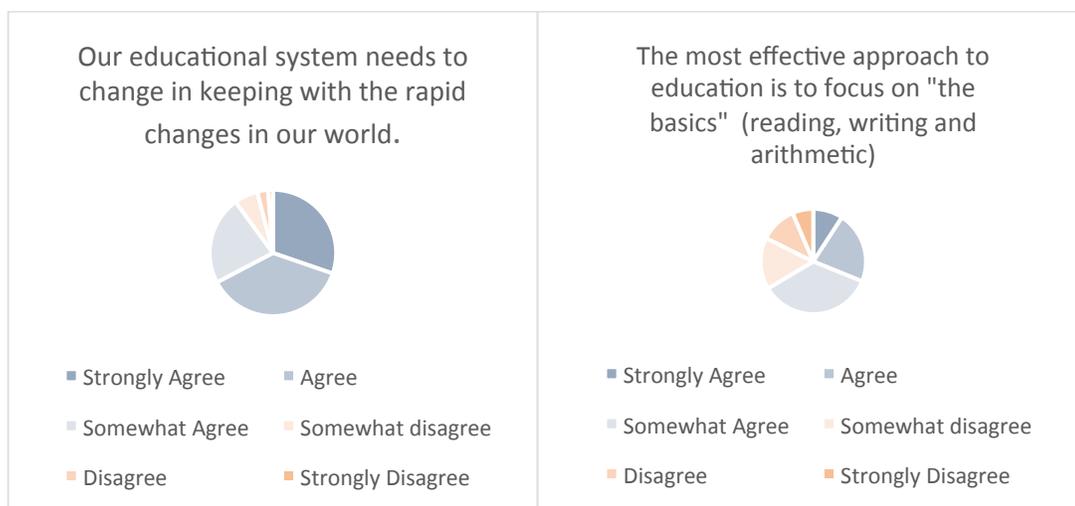


Figure 1. Comparison of beliefs about educational change with direction of change

Consistent with this general support of change broadly defined, **93% of survey respondents supported the idea that teaching methods need to change in response to new research on teaching and learning, although again, the strength of this belief reflects a confusion over the nature of such change.** Sixty-seven percent of respondents suggested that teaching methods needed to change some, while 26% felt that they should change a lot.

Regarding the scope of teaching and learning, survey responses indicated strong agreement and agreement across all respondents (95%) that the scope of teaching and learning ought to include a broad range of knowledge and skills, including communication and problem solving. The only notable variation in stakeholder response was the strength of agreement with this idea amongst student respondents, who answered somewhat agree (23%) in higher numbers than educators (11%). This finding may reflect the belief amongst student respondents that basic subject knowledge is also important, as 78% of students agreed at least somewhat that basic knowledge should be the focus of learning. **Taken together, the responses to these survey questions suggest that while all respondents demonstrate an understanding of the importance of skill-building through teaching and learning, many feel conflicted or take a “both/and” approach to the idea of content and skills building.**

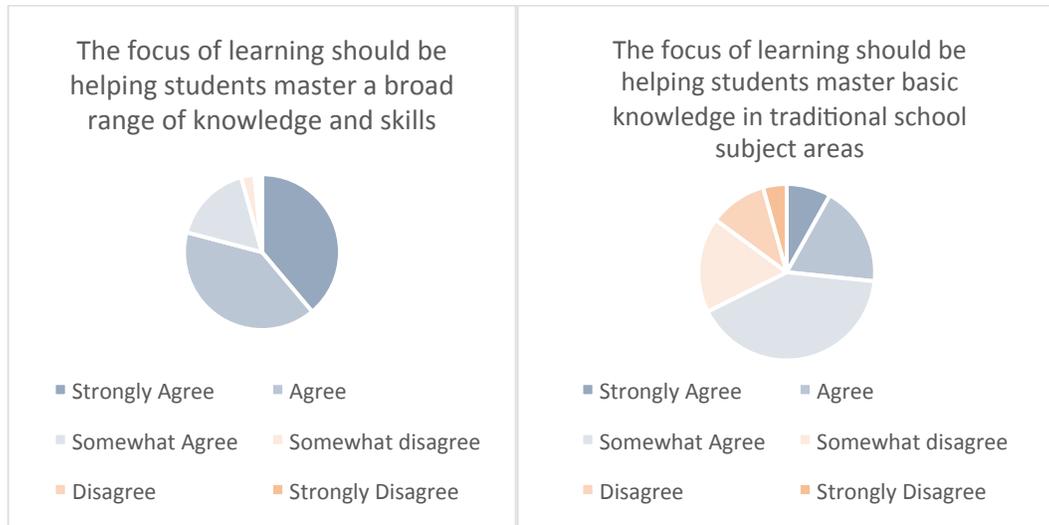


Figure 2. Comparison of beliefs about the scope of education

These findings are supportive of previous research in this area by Frameworks Institute concerning the “swamp” of communication in the educational reform space. Despite pre-awareness concerning the specific beliefs that would support the effective implementation of Act 77, there is evidence that there is a strong feeling of the need to change current educational practice in response to the changing needs of our world.

Beliefs about intelligence and motivation (Q5, Q18, Q19)

With regard to respondent beliefs about intelligence, educators demonstrated their understanding of current research on neuroplasticity, while there was evidence that some students responded to the survey in ways that suggested some remain in the pre-awareness category. The survey question “Which of the following statements best reflects your ideas about the nature of an individual’s ability to learn?” was designed to measure respondents’ beliefs about intelligence and their understanding of the neuroplasticity of the brain (see Dweck, 2006, for a discussion of growth versus fixed mindsets in learning). Respondents selected from three options, including ability to learn is largely fixed at birth, ability is fixed at birth but can be influenced somewhat by environment, and the ability to learn is largely not fixed at birth, it grows through effort, use, and the right kinds of support. Respondents generally favored the idea that ability is not fixed at birth, but rather grows through effort, use and the right kinds of support, with 80% of respondents overall selecting this response.

Educators selected this response at the highest rates, with 90% and 91% respectively choosing this response over others. Only 69% of students, however, selected the response representative of growth mindsets. Instead, 24% of students believed that ability was largely fixed at birth but could be influenced somewhat by environment, while 7% of students (as compared to less than one percent of adults) believed that ability is fixed at birth.

Motivation proved to be a more contentious issue for survey respondents. While the majority of survey respondents agreed that high school students have the motivation to design and direct their own learning with the support of adults, one fourth of educators disagreed at least somewhat with this statement. Furthermore, the issue of whether students were primarily motivated by grades split respondents fairly evenly, with 53% of respondents agreeing at least somewhat that students were primarily motivated by grades. Students agreed in greater numbers than other stakeholder groups that they

were likely to be motivated by grades (66% in comparison to 42% of educator respondents). **This data suggests that a greater proportion of students' mental models of motivation remain in the pre-awareness category, while more than half of educators demonstrate at least awareness that intrinsic motivation can play a role in teaching and learning.**

Beliefs about the role of teachers and students in teaching and learning (Q8, Q9, Q14, Q15)

It was clear that there was a strong feeling amongst many of the respondents that teaching and learning was the responsibility of teachers and students jointly. However, there were large differences between educators and students, who varied in the strength of their beliefs about these topics. Almost all respondents (97%) agreed that successful learning depends on students taking an active role in their learning, and that teachers should guide, coach and facilitate active learning partnerships between themselves and students (97%). These high levels of agreement suggest a strong belief in student-directed, active learning amongst survey respondents.

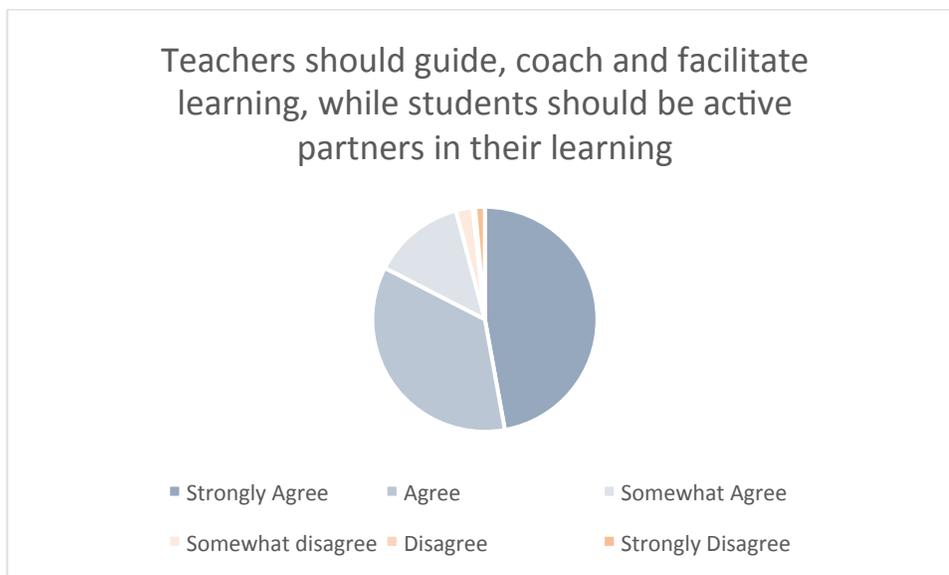


Figure 3. *Respondent beliefs on the role of teachers and students in teaching and learning*

However, the strength of agreement varied greatly between student and educator responses, with 57% of educators strongly agreeing that students should take an active role in their learning, as compared to only 31% of students. By comparison, two-thirds of respondents agreed that the learning process is the teacher's responsibility. Interestingly, educators tended to at least somewhat agree with this statement at slightly lower rates than students, the majority of whom agreed at least somewhat with this statement (74%). Similarly, the vast majority of educators strongly agreed or agreed that teachers should be coaches and students should be active partners in their learning (94% on average), while only 69% of students strongly agreed or agreed with this idea.

In keeping with these findings, respondent beliefs about teacher-centered instructional strategies seemed to be mixed. While two-thirds of all respondents disagreed at least somewhat with the statement that teacher lecture and presentation ("sage on the stage") instructional methods were the most effective way for students to learn, student respondents disagreed with this idea in lower numbers (44%) than adult respondents on average (75%).

Beliefs about alternative learning pathways (Q11, Q16)

A clear majority of respondents (95%) agreed that learning outcomes would be improved if alternative pathways were made available to all students as an option to fulfill graduation requirements. However, respondent beliefs about alternative learning pathways, particularly with regard to equality and rigor, demonstrated that one-third of respondents believe that students who choose alternative pathways generally do so because they cannot succeed in traditional classroom settings. Again, there were notable differences in responses between educators and students. While 77% of educators disagreed at least somewhat with the idea that students who choose alternative pathways do so because they are ill-suited to traditional classroom settings, only 56% of students disagreed at least somewhat with this idea.

Understanding of Act 77 (Q2 and Q3)

Perhaps unsurprisingly, educators indicated that they felt that they had at least some understanding of Act 77. While 76% of educators felt that they had some understanding of Act 77, 70% of students felt that they had little or no understanding of the legislation. However, in no stakeholder group did a majority of the respondents feel that they understood Act 77 well (educators, 21%, students, 8%).

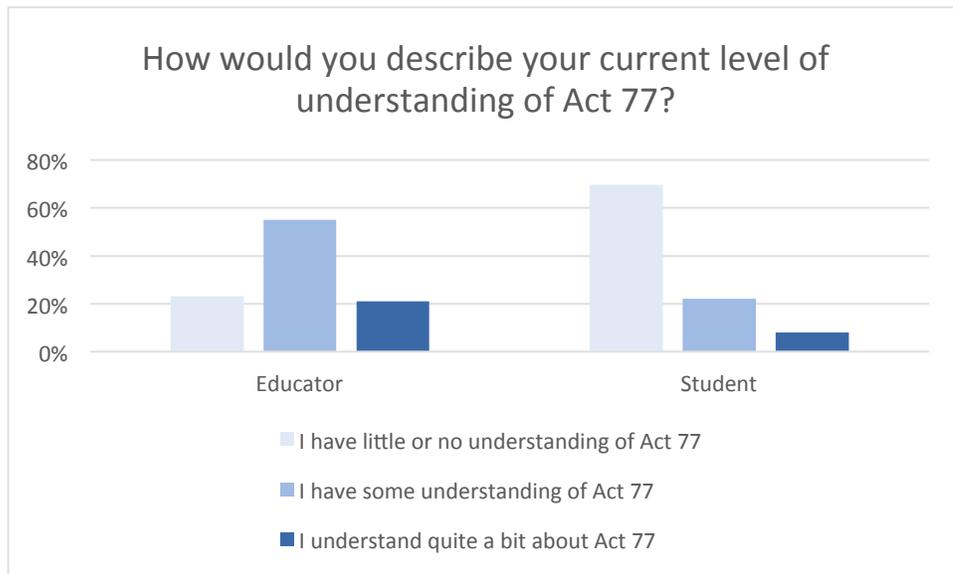


Figure 4. *Current level of understanding of Act 77 by stakeholder group*

In keeping with this finding, **educators responded in the greatest numbers (96%) that they actually had some understanding of current efforts to change teaching and learning in Vermont.** Only 42% of student respondents, however, felt that they had some understanding of these efforts, indicating that **the majority of students felt that they did not know about or understand current efforts to change teaching and learning in the state.**

Profiles of individual stakeholder groups

Student respondents (n=266)

Student responses tended to reflect the greatest diversity of all of the respondent groups and also reflected higher levels of pre-awareness of the beliefs that support the implementation of Act 77 (as

compared to educators). However, beliefs across the sample of students surveyed were also less clustered than other respondent groups, demonstrating more variable levels of awareness within this population than within other groups. Of all respondent groups, students indicated the lowest levels of awareness about Act 77, with 70% indicating that they had little to no understanding of the legislation.

With regard to their mental models of education, teaching and learning, 3 out of 4 students at least somewhat agreed (75%) that a return to “the basics” (reading, writing, arithmetic) was the most effective approach to education. Similarly, 78% of students agreed that the focus of education should be basic knowledge in traditional subjects. However, the great majority (92%) of students agreed at least somewhat that 21st century skills ought to be the main focus of education. It is difficult to reconcile this contradictory data; however, evidence from the student interviews conducted by UP for Learning in 2013 suggest that students likely believe that both skills and content are important for their educations. Therefore, in crafting a communication plan for this group, speaking to the goals for learning of Act 77 with regard to both skills and content may be important.

The majority of students (86%) agreed at least somewhat with the idea that our education system needs to change, though compared with adult respondents the strength of this opinion was less strong amongst students. Nearly 9 out of 10 students felt that teaching methods needed to change, though again, this was lower than educators whose agreement with this was almost universal. Perhaps most interesting was the finding that 44% of students at least somewhat agree with the idea that standardized tests are the best way to measure student learning.

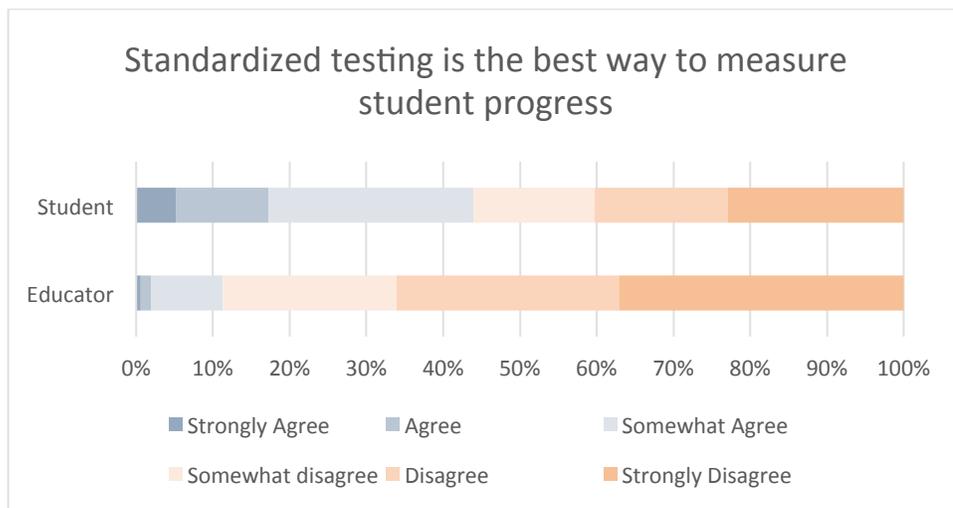


Figure 5. Comparison of beliefs about standardized testing by stakeholder group

With regard to this stakeholder group’s mental model of intelligence and motivation, students agreed more than any other stakeholder group that intelligence was fixed at birth. Seven percent of students believed that intelligence was fixed at birth and could not be changed and 24% believe that intelligence is fixed at birth and can be slightly influenced by environment. Therefore, although 68% of students agreed that intelligence could be enhanced through effort and the right kinds of support, there was still a sizeable minority demonstrating pre-awareness of beliefs about intelligence supporting the implementation of Act 77. With regard to motivation, students agreed in greater numbers than educators (66% vs. 42%) that grades were the primary motivator for students. However, students agreed in slightly higher numbers than other stakeholder groups that high school students have the motivation to design and direct their own learning.

With regard to their mental models of teacher and student responsibilities in teaching and learning, 92% of students agreed that learning is at least partly dependent on students taking an active role in their learning. Again, while it is clear that the vast majority of students agree with this statement, more students disagreed with this statement or agreed less strongly when compared to educators. Students also agreed in greater numbers than educators that the most effective way to learn is for teachers to share their expertise through presentations and lectures (“sage on the stage” style of teaching), with 57% of students at least somewhat agreeing. Similarly, 74% of students at least somewhat agreed that learning is the teacher’s responsibility as they direct and design learning. However, 92% of students also agreed that teachers should coach and facilitate while students should be active partners in their learning. The high agreement of students with all of these seemingly contradictory ideas is difficult to interpret; however, it is possible that a broad interpretation of “partnership” and “active learning” are contributing to this phenomenon. Regardless, it is clear that one task for a subsequent communication strategy might be to clarify the meanings of these words that best support the implementation of Act 77.

With regard to their perceptions of alternative pathways, students were stronger than educators in their belief that students who opted for alternative pathways did so because they were ill-suited to traditional classroom settings. It is possible that this is indicative of a certain stigmatization of these pathways amongst students. However, the majority of students (93%) agreed, at least somewhat, that learning outcomes will be improved if graduation requirements are able to be filled through internships independent studies and virtual learning. So, while the wide range of opinion about existing alternative pathways suggests a diversity of awareness of the possibilities that alternative pathways might provide in complementing traditional classroom instruction, the majority of students seem to indicate that there exists great possibility for innovation in learning in this area, indicating a certain agreement and understanding of the pedagogical architecture underpinning Act 77.

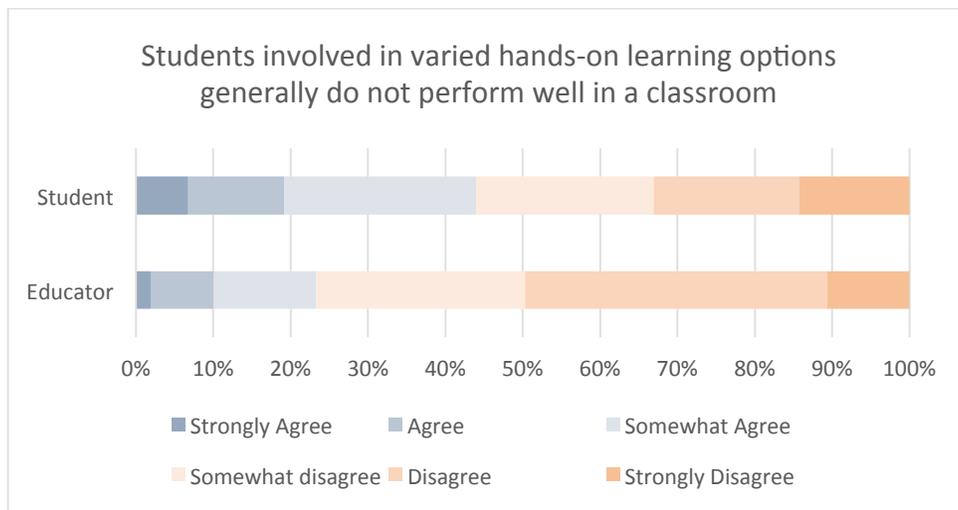


Figure 6. *Beliefs about existing alternative pathways by stakeholder groups*

Educator respondents (n=159)

Educators’ answers to the survey reflected the highest level of awareness and understanding of the beliefs that supported the implementation of Act 77. Educators’ responses indicated that they had the highest level of understanding of Act 77, with 77% responding that they had at least some understanding of the legislation, and 96% indicating that they had at least some understanding of Vermont’s current efforts to change teaching and learning practices.

Ninety-five percent of educators agreed at least somewhat with the statement that education ought to change in order to keep pace with our rapidly changing world, with 76% agreeing or strongly agreeing that this was important. This trend was also reflected in finding that 99% of educators agree that teaching methods need to change. Of all the respondent groups, educators disagreed in the greatest numbers with the idea that a return to the basics (3Rs) was the most effective way to learn, with 45% of educators at least somewhat disagreeing with this statement. In keeping with this finding, 97% of educators felt that the focus of education ought to be 21st century skills, while 59% agreed at least somewhat that the focus of education should be mastering basic knowledge. These findings suggest that even educators who feel that education should focus on “the basics” feel that there should be some focus on 21st century skill-building. In support of this, 89% of educators disagreed at least somewhat that standardized tests are the most effective way to measure student progress. Overall, the majority of educators seem to demonstrate understanding of the beliefs about education that support the implementation of Act 77.

With regard to their beliefs about the relative role of teachers and students in the teaching and learning process, 98% of educators agreed that success in learning depends on students taking an active role. Similarly, 79% of teachers disagreed at least somewhat with the idea that the most effective way to learn was through teacher presentations or lectures. The fact that no educators strongly agreed with this statement and that those that agreed with this statement only did so somewhat suggests that educators demonstrate an understanding of the teaching methods needed to support the successful implementation of Act 77. However, with regard to the teacher’s specific role in the teaching and learning process, educators seemed to be fairly evenly split on the question of whether the teacher was ultimately responsible for designing and directing student learning. Fifty-five percent of educators at least somewhat agreed that they were responsible for student learning, while 45% of educators at least somewhat disagreed with this idea. However, it was clear that most educators felt strongly that students ought to be active partners in learning: 64% of educators strongly agreed with this statement.

With regard to their perceptions of alternative learning pathways, educators disagreed in the greatest numbers (77%) of all stakeholder groups that students who opt for alternative pathways do so because they are not successful in traditional classroom environments. Similar to other stakeholder groups, however, they also generally agreed (96%) that increased access to alternative learning pathways would increase learning.

With regard to their mental models of intelligence and motivation, fifty-eight percent of educators disagreed at least somewhat with the idea that students were primarily motivated by grades. However, educators also agreed in slightly lower numbers than students that high school students were able to design and direct their own learning. This finding suggests that there is a disconnect for some educators between their agreement that students should be active partners in their learning (which 97% agreed with at least somewhat) and seeing partnership as directing and designing their own learning opportunities. It is also possible that some educators feel that there is a connection between these ideas, but do not feel that high school students are ready for this responsibility. This contradiction suggests that educators may have awareness about what is necessary for successful youth-adult partnership but a lack of understanding how to actualize this awareness into action.

CONCLUSION

These survey findings paint an encouraging picture of the baseline beliefs about education, teaching and learning that exist in Vermont’s schools. Amongst both educators and students, there are definitely sizeable groups of individuals whose mental models of education, teaching and learning will

support the successful implementation of Act 77. Particularly encouraging was the general agreement or strong agreement of educators with beliefs which will support Act 77's implementation, as well as the majority agreement from community member and parent stakeholder groups.

However, these findings also demonstrate a clear imperative for communication for social change within this space. In particular, students demonstrated beliefs that must be shifted in order for them to successfully fulfill the new roles that they will be asked to take on within the implementation of Act 77. While students indicated their belief in their own ability to take on new responsibilities with regard to teaching and learning, their beliefs about their own stakeholder group as a whole will need to be addressed, particularly the stigmatization of alternative learning pathways, their beliefs about the division of responsibility between themselves and teachers, as well as their understanding of current research about intelligence, teaching and assessment. One opportunity, however, in addressing communication to this stakeholder group is the clear diversity in awareness levels of students about these topics. Students who demonstrate a comprehensive grasp on the research, concepts and beliefs that will support the implementation of Act 77 are in a strong position to shift the beliefs of their peers with regard to this redesign of the public school system.

In this, students are not alone. The findings from this survey also indicated that among educators, a minority remain at the level of pre-awareness of beliefs and which will support the implementation of Act 77 and school redesign. Both youth and adults are well-positioned to speak back to these stakeholder groups and work to facilitate dialogue to shift their mental models to ones which will support the success of Act 77 in redesigning Vermont's public schools. In particular, it is clear that creating clarity around what is meant by the language of school redesign (especially terms which have become confused in the public understanding such as "active learning", "partnership", and "skill-building") will be important to create a consensus among educators and students and in particular to support the movement of everyone in these groups from understanding to engagement and advocacy.

Lastly, it is clear from these findings that awareness about Act 77 itself remains low. A communication strategy that ties clarity around language, clear communication of key concepts and supportive belief structures, and information about the legislation itself will be essential to build public understanding and support for Act 77. The results of this survey indicate most clearly that it will not be enough to simply educate the public about the requirements of the legislation; communication strategies which support a shift in public understanding towards school redesign itself are essential.

WORKS CITED:

Biddle, C., Feinberg, J. & Beattie, H. (2014). *Education for what? Youth mental models of education, teaching and learning*. Prepared for Unleashing the Power of Partnership for Learning (Up for Learning).

Dweck, C. (2006). *Mindset: The new psychology of success*. New York: Random House.