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| **Topic of Source** | **Source** | **Details** | **Notable Takeaways** |
| Illustrates the power of Sense of Belonging, and why we should measure sense of belonging | [Science of Learning and Development](https://www.youtube.com/watch?v=o1VoUImKYDE) | Dr. Pamela Cantor, Turnaround for KidsDr. Linda Darling Hammond | * The building of nurturing and collaborative relationships with adults can literally reverse the neural effects of adverse child experiences (ACEs) that negatively affect learning and development. Presence of these relationships can and should be measured. (Sense of Belonging)
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| What conditions motivate learners and adults | [The Surprising Science About What Motivates Us](https://www.youtube.com/watch?v=u6XAPnuFjJc) | Summary of multiple studies led by scientists from Carnegie Melon, MIT, some funded by Federal Reserve | * Findings: the more cognitively challenging a task, and the higher the stakes, the less extrinsic rewards motivate or produce results
* 3 most important drivers to personal satisfaction and success: Autonomy (self-direction, agency), Mastery (urge to get better at something), Purpose (sense you’re making a difference)
	+ How might this apply to learners?
	+ How might this apply to teachers?
	+ Can we measure these things?
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| Survey resources and analysis of survey data around student and teacher agency | [American Institute of Research: Implementing and Measuring Student-Centered Learning Practices](https://drive.google.com/file/d/1iS0K-2GPClnqpDpDlOr-U4S9WGukIweC/view?usp=sharing) |  | * **Increased Learner Agency led to learners reporting higher engagement**
* Increased Learner Agency led to increased learning outcomes and had positive correlations with career and college readiness data
* Teachers identified supportive school-wide processes, teacher collaboration, and professional development as the primary facilitators of implementation of instructional practices that promote agency.
* The skills and behaviors associated with student agency are positively related to college and career outcomes because students are able to direct their own learning and transfer the knowledge they learned in the classroom to new settings.
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| Examples of deeper learning instructional practices and how they contribute to higher outcomes and equity | [Providing Rich Educational Experiences for ALL Students](https://www.edutopia.org/article/providing-rich-educational-experiences-all-students) | EdutopiaProviding Rich Educational Experiences for all StudentsJuly 17, 2019 | * Instead of working around or accommodating areas of weakness educators can strengthen the skills of most students w/learning differences through relevant instruction and targeted, research-based instructions.
* All students benefit from being provided w/rich, authentic learning tasks that make what is being taught come to life.
	+ How can we measure this? Backpack?
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| Resources on capturing and measuring student-centered evidences | [Panorama Student-Centered Learning Survey](https://drive.google.com/file/d/1gULaMF65-d-HLD3vJTVLccIGP7zHcvrU/view?usp=sharing) | [Panorama Education](https://www.panoramaed.com/about) | * Potential research resources; question sets, administration support, analysis support
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| Resources on capturing and measuring student-centered evidences | [Student Experience 21 - Student Experience Surveys](https://www.battelleforkids.org/how-we-help/the-student-experience21) | [Battelle for Kids/EdLeader21](https://www.battelleforkids.org/about-us) | * Potential research resources; question sets, administration support, analysis support, data dashboards, etc.
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